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EXAMINER	
ESCALANTE, OVIDIO	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/626,168	Applicant(s) MULLANEY ET AL.	
	Examiner Ovidio Escalante	Art Unit 2645	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 March 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-49,51-63 and 69-82* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-49,51-63 and 69-82* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☒ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to applicant's preliminary amendment filed on March 15, 2004. **Claims 1-49,51-63,69-82** are now pending in the present application.

2. Since the Office Action mailed on February 23, 2004 did not considered the Preliminary Amendment that was originally received on July 10, 2002 (resent on March 15, 2004 with Auto-Reply Facsimile Transmission from the USPTO), the Office Action mailed February 23, 2004 is hereby vacated and a substitute new Office Action is issued below.

Information Disclosure Statement

3. The information disclosure statements submitted on November 6, 2000, February 7, 2001, February 12, 2001 and February 26, 2002 were received. The submissions are in compliance with the provisions of 37 CFR 1.97. Accordingly the information disclosure statements are being considered by the examiner.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-11,14-16,19,20,27-37,40-42,45-48,51-53,59 and 69-70 are rejected under 35 U.S.C. 102(b) as being anticipated by Giacoppo et al. US Patent 4,115,665.

Regarding claim 1, Giacoppo teaches a telecommunications terminal block (fig. 2) for making and breaking connections with a telecommunications conductor, (fig. 3; col. 1, lines 33-40), said terminal block comprising:

a base (14) having a first connector and a second connector mounted therein, (fig. 3; col. 2, lines 19-25; first and second connectors are within base (14) for connecting the base with the conductors);

a first conductor (13b) extending from the base, the first conductor being electrically connected to the first connector, (fig. 3; col. 2, lines 19-25);

a second conductor (13a) extending from the base, the second conductor being electrically connected to the second connector, (fig. 3; col. 2, lines 19-25); and

a service module (20) configured to be removably mounted to the base, (fig. 3; col. 2, lines 19-38), the service module comprising:

a service wire connector (22a, 22b) configured to receive a customer telecommunications conductor, (col. 2, lines 35-38); and

a contact member (23a, 23b) that electrically connects the service wire connector to the first conductor when the service module is mounted to the base, (col. 2, lines 29-38);

wherein the first conductor and the second conductor are configured so as to electrically connect the first connector and the second connector when the service module is removed from the base (fig. 3; col. 2, lines 25-38) and wherein the service module is configured to interrupt the electrical connection of the first connector and the second connector when the service module is mounted to the base, (col. 2, line 65-col. 3, line 5).

Regarding claims 2 and 28, Giacoppo teaches wherein the contact member is configured to disconnect the electrical connection of the first connector and the second connector when the service module is mounted to the base, (col. 2, lines 25-38; col. 2, line 65-col. 3, line 5).

Regarding claims 3 and 29, Giacoppo teaches wherein the service wire connector comprises a first end of a longitudinally extending conductive member positioned to receive the customer telecommunications conductor (col. 2, lines 35-38) and wherein the contact member comprises a second end of the longitudinally extending conductive member, the second end of the longitudinally extending conductive member contacting the first conductor when the service module is mounted to the base, (fig. 3; col. 2, lines 25-38).

Regarding claims 4 and 30, Giacoppo teaches wherein the service module (20) further comprises a conductor chamber and the service wire connector is positioned in the conductor chamber, (fig. 3; col. 2, lines 29-38).

Regarding claims 5 and 31, Giacoppo teaches wherein the service module further comprises a passageway extending into the conductor chamber having an opening for receiving the customer telecommunications conductor and positioned to pass the customer telecommunications conductor to the service connector, (fig. 3).

Regarding claims 6 and 32, Giacoppo teaches wherein the first conductor is positioned adjacent to the second conductor so as to contact the second conductor when the service module is removed from the base, (fig. 3; col. 2, lines 29-38).

Regarding claims 7 and 33, Giacoppo wherein the service module further comprises a nonconductive member positioned to pass between the first conductor and the second conductor when the service module is mounted to the base and wherein the first conductor and the second conductor comprise a spring clip, (fig. 3; col. 2, lines 29-38).

Regarding claims 8 and 34, Giacoppo teaches wherein the nonconductive member extends from a bottom surface of the service module adjacent the base, (fig. 3).

Regarding claims 9 and 35, Giacoppo teaches wherein the contact member comprises:

an electrically conductive layer on a surface of the nonconductive member adjacent the first conductor when the service module is mounted to the base, (fig. 3; col. 2, lines 29-38); and

a connector that electrically connects the electrically conductive layer to the service wire connector, (fig. 3).

Regarding claims 10 and 36, Giacoppo wherein the nonconductive member includes a channel in a surface thereof adjacent the first conductor when the service module is mounted to the base and wherein the contact member is received in the channel of the nonconductive member, (fig. 3; col. 2, line 65-col. 3, line 5).

Regarding claims 11 and 37, Giacoppo teaches wherein the first connector comprises a first end of a second longitudinally extending conductive member and the first conductor comprises a second end of the second longitudinally extending conductive member (fig. 3; col. 2, lines 10-38) and wherein the second connector comprises a first end of a third longitudinally extending conductive member and the second conductor comprises a second end of the third longitudinally extending conductive member, (fig. 3).

Regarding claims 14 and 40, Giacoppo teaches wherein the terminal block further comprises:

a third connector and a fourth connector mounted in the base (14), (fig. 3; second base in fig. 3);

a third conductor (13b) extending from the base, the third conductor being electrically connected to the third connector, (fig. 3; col. 2, lines 19-25);

a fourth conductor (13a) extending from the base, the fourth conductor being electrically connected to the fourth connector, the fourth conductor and the third conductor comprising a second spring clip, (fig. 3); and

wherein the service module further comprises:

a second service wire connector configured to receive a second customer telecommunications conductor, (fig. 3; col. 2, lines 19-38); and

a second contact member that electrically connects the second service wire connector to the third conductor when the service module is mounted to the base, (fig. 3; col. 2, lines 35-38);

wherein the second spring clip electrically connects the third connector and the fourth connector when the service module is removed from the base (col. 2, lines 25-38) and wherein the second contact member is configured to electrically disconnect the first connector and the second connector when the service module is mounted in the base, (fig. 3; col. 2, line 65-col. 3, line 5).

Regarding claims 15 and 41, Giacoppo teaches wherein the nonconductive member includes a second channel in a surface thereof adjacent the third conductor when the service module is mounted to the base and wherein the second contact member is received in the second channel of the nonconductive member, (fig. 3; col. 2, lines 29-38).

Regarding claims 16 and 42, Giacoppo teaches wherein the second channel and the first channel are in opposite surfaces of the nonconductive member, (fig. 3; col. 2, lines 29-38).

Regarding claims 19 and 45, Giacoppo teaches wherein the second service wire connector comprises a first end of a fourth longitudinally extending conductive member positioned to receive the second customer telecommunications conductor (fig. 3; col. 2, lines 10-

38) and wherein the second contact member comprises a second end of the fourth longitudinally extending conductive member, the second end of the fourth longitudinally extending conductive member contacting the third conductor when the service module is mounted to the base, (fig. 3).

Regarding claims 20 and 46, Giacoppo teaches wherein the first longitudinally extending conductive member further comprises a circuit connector and the fourth longitudinally extending conductive member further comprises a second circuit connector, the circuit connector and the second circuit connector being positioned to receive an electrical device therebetween, (fig. 3; col. 2, lines 28-38).

Regarding claim 47, Giacoppo teaches wherein the base is elongate and defines a first axis and wherein the first spring clip is positioned adjacent and laterally offset from the second spring clip with reference to the first axis and wherein a plurality of service modules (figs 1 and 2) are removably mounted to the elongate base along the first axis, (fig. 3).

Regarding claim 48, Giacoppo teaches wherein the base includes an elongate chamber and wherein the first spring clip and the second spring clip are positioned in the elongate chamber, (fig. 3).

Regarding claim 27, Giacoppo teaches a telecommunications terminal block for making and breaking connections with a telecommunications conductor, (col. 1, lines 33-40; fig. 3), said terminal block comprising:

a base (14) having a first connector and a second connector mounted therein, (fig. 3; col. 2, lines 19-25);

a first conductor (13b) extending from to the base, the first conductor being electrically connected to the first connector, (fig. 3; col. 2, lines 19-25);

a second conductor (13a) extending from the base, the second conductor being electrically connected to the second connector, (col. 2, lines 19-25); and

a service module configured to be movably mounted to the base for movement between a first position adjacent the base and a second position displaced vertically from the base, (col. 2, lines 19-38), the service module comprising:

a service wire connector (22a,22b) configured to receive a customer telecommunications conductor, (col. 2, lines 35-38); and

a contact member (23a,23b) that electrically connects the service wire connector to the first connector when the service module is in the first position, (col. 2, lines 29-38);

wherein the first connector and the second connector are configured so as to electrically connect the first conductor and the second conductor when the service module is in the second position (col. 2, lines 25-38) and wherein the service module is configured to interrupt the electrical connection of the first conductor and the second conductor when the service module is in the first position, (col. 2, line 65-col. 3, line 5).

Regarding claim 51, Giacoppo teaches a telecommunications terminal block for making and breaking connections between a first telecommunications conductor (13b), (col. 1, lines 33-40), a second telecommunications conductor (13a) and a service wire, (22a), said terminal block comprising:

a housing having a first connector connected to the first telecommunications conductor and a second connector connected to the second telecommunications conductor mounted therein, (fig. 3; col. 2, lines 19-38);

a first conductor in the housing, the first conductor being electrically connected to the first connector and having a service wire connector portion configured to receive the service wire, (col. 2, lines 19-38; fig. 3);

a switch electrically connecting the first connector and the second connector, the switch having a first state wherein the first connector is electrically connected to the second connector and a second state wherein the first connector is electrically disconnected from the second connector, (col. 2, lines 19-38).

a third connector mounted adjacent the second connector in the housing, the first connector being electrically connected to the third connector, (fig. 3); and

a select module positioned over the second connector and the third connector, the select module having a first position electrically connecting the second connector and the third connector and a second position wherein the second connector and the third connector are not electrically connected, (fig. 3).

Regarding claim 52, Giacoppo teaches wherein the select module further comprises:

a housing, (fig. 3); and

a jumper conductor mounted in the housing of the select module, the jumper conductor having, when the select module is in the first position, a first end positioned to contact the second connector and a second end positioned to contact the third connector, (col. 2, lines 28-38,65-col. 3, line 5).

Regarding claim 53, Giacoppo teaches wherein the first connector comprises a first end of a longitudinally extending member and the first conductor comprises an opposite end of the

longitudinally extending member (fig. 3; col. 2, lines 10-38) and wherein the housing of the terminal block comprises:

a base (14) having a first portion and a second portion, the longitudinally extending member being mounted in the first portion with the first conductor extending from an upper surface of the base, the second connector and the third connector being mounted in the second portion of the base, (fig. 3; col. 2, lines 10-38);

a movably mounted service wire connector member positioned adjacent the upper surface of the base in the first portion, the service wire connector member including a service wire receiving passageway that receives a service wire for connection to the first conductor, the service wire connector member having a first position that provides access to an opening to the service wire receiving passageway to receive a service wire and a second position wherein a portion of the service wire receiving passageway passes through an opening in the first conductor, (fig. 3; col. 2, lines 10-38); and

wherein the housing of the select module is mounted to the base adjacent the second portion, (fig. 3).

Regarding claim 59, Giacoppo teaches a telecommunications terminal block for making and breaking connections between a first telecommunications conductor (13b), (col. 1, lines 33-40), a second telecommunications conductor (13a) and a service wire, (22a), said terminal block comprising:

a housing having a first connector connected to the first telecommunications conductor and a second connector connected to the second telecommunications conductor mounted therein, (fig. 3; col. 2, lines 19-38);

a first conductor in the housing, the first conductor being electrically connected to the first connector and having a service wire connector portion configured to receive the service wire, (col. 2, lines 19-38; fig. 3);

a switch electrically connecting the first connector and the second connector, the switch having a first state wherein the first connector is electrically connected to the second connector and a second state wherein the first connector is electrically disconnected from the second connector, (col. 2, lines 19-38). And

wherein the housing of the terminal block further comprises:

a base (14) having a first portion and a second portion, the first connector and the first conductor (13b) being mounted in the first portion with the service wire connector portion extending from an upper surface of the base, the second connector being mounted in the second portion of the base, (fig. 3);

a movably mounted service wire connector member positioned adjacent the upper surface of the base in the first portion, the service wire connector member including a service wire receiving passageway that receives a service wire for connection to the first conductor, the service wire connector member having a first position that provides access to an opening to the service wire receiving passageway to receive a service wire and a second position wherein a portion of the service wire receiving passageway passes through an opening in the service wire connector portion of the first conductor, (fig. 3; col. 2, lines 10-38);

a contact member electrically connected to the second connector and extending from the base of the housing of the terminal block and contacting the first conductor, (fig. 3); and

an actuator positioned in the service wire connector member so as to allow the contact member to contact the first conductor in the first position of the service wire connector member and to break the contact between the contact member and the first conductor in the second position of the service wire connector member, (fig. 3; col. 2, lines 10-38).

Regarding claim 69, Giacoppo teaches a telecommunications terminal block for making and breaking connections with a telecommunications conductor, (col. 1, lines 33-40; fig. 3), said terminal block comprising:

a base (14) having a first connector and a second connector mounted therein, (col. 2, lines 19-25; fig. 3);

a first conductor (13b) extending from the base, the first conductor being electrically connected to the first connector, (col. 2, lines 19-38; fig. 3);

a second conductor extending from the base, the second conductor being electrically connected to the second connector, (col. 2, lines 19-25); and

means for electrically connecting a service wire connector to the first conductor and for interrupting the electrical connection of the first connector and the second connector when the first conductor is connected to the service wire connector and means for electrically connecting the first connector and the second connector when the first conductor is not connected to the service wire connector, (col. 2, lines 10-38).

Regarding claim 70, Giacoppo teaches a telecommunications terminal block for making and breaking connections with a severed telecommunications conductor, (col. 1, lines 33-40; fig. 3), comprising:

means for connecting to a first end and a second end of the severed telecommunications conductor, (col. 2, lines 10-38; fig. 3); and

means for connecting the first end to a customer service wire and disconnecting the first end from the second end when the first end is connected to the customer service wire and for connecting the first end and the second end when the first end is not connected to the customer service wire, (col. 2, lines 10-38; fig. 3).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Claims 12,13,21,2,38,39,54,55 and 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Giacoppo in view of Meyerhoefer US Patent 5,704,797.

Regarding claims 12 and 38, Giacoppo, as applied above, does not specifically teach wherein the service wire connector is an insulation displacing connector. However, it would have been obvious that the service wire connector is Giacoppo is an insulator displacing connector

since the service wire connector is able to break the connection by touching the two conductor wires.

Nonetheless, in the same field of endeavor, Meyerhoefer teaches of severing telecommunication connections by inserting a plug into a telecommunication socket, (col. 8, lines 5-17). Meyerhoefer further teaches wherein a service wire connector is an insulation displacing connector, (col. 3, lines 46-58).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Giacoppo by having the service wire connector being an insulation displacing connector as taught by Meyerhoefer so that the service wire can break the telecommunication connection in the terminal.

Regarding claims 13 and 39, Giacoppo teaches wherein the service module further comprises: a base portion defining a conductor chamber, (fig. 3).

Giacoppo does not specifically teach of a cover movable connected to a first end of the based portion and wherein rotation of the cover to a closed position connects the customer telecommunications conductor to the insulation displacing connector.

In the same field of endeavor, Meyerhoefer teaches a cover movably connected to a first end of the base portion on a top portion thereof displaced from the base of the terminal block, (fig. 10); and

a passageway in the cover extending into the conductor chamber, the passageway having an opening on a second end of the cover opposite the first end for receiving the customer telecommunications conductor (fig. 10), the passageway being positioned to pass the customer telecommunications conductor to the insulation displacing connector; and

wherein rotation of the cover to a closed position connects the customer telecommunications conductor to the insulation displacing connector, (fig. 10).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the service module of Giacoppo by using a using a cover and wherein when the cover is rotated the customer telecommunication conductor is connected with the cover is in a closed position as taught by Meyerhoefer so that severing and connecting service wires can be done with minimum effort by a worker.

Regarding claims 21, Giacoppo teaches wherein the base is elongate and defines a first axis and wherein the first spring clip is positioned adjacent and laterally offset from the second spring clip with reference to the first axis and wherein a plurality of service modules are removably mounted to the elongate base along the first axis, (fig. 3).

Regarding claims 22, Giacoppo teaches wherein the base includes an elongate chamber and wherein the first spring clip and the second spring clip are positioned in the elongate chamber, (fig. 3).

Regarding claim 54, Giacoppo, as applied above, does not specifically teach of an insulation displacing connector and where the service wire connector member is rotatably mounted to the base.

In the same field of endeavor, Meyerhoefer teaches wherein the first conductor is an insulation displacing connector and wherein the service wire connector member is rotatably mounted to the base to insert a service wire in the passageway into the insulation displacing connector and wherein the housing of the select module is mounted to the base in a first

orientation in the first position of the select module and in a second orientation in the second position of the select module, (fig. 10).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Giaccoppo by having the service wire connector being an insulation displacing connector as taught by Meyerhoefer so that the service wire can break the telecommunication connection in the terminal and so that the by having the rotablably mounted service wire breaking and reconnecting service connection can be done easily.

Regarding claim 55, Giacoppo in view of Meyerhoefer, as applied above teach wherein the second orientation comprises substantially a 180° rotation from the first orientation, (fig. 6, Meyerhoefer).

Regarding claim 60, Giacoppo in view of Meyerhoefer, as applied above, teach wherein the contact member comprises a first end of an elongate conductive member and wherein the second connector comprises a second end of the elongate conductive member and wherein the actuator comprises a cam, (col. 3, line 59-col. 4, line 9; col. 9, lines 11-23; Meyerhoefer).

9. Claims 17,18,26,43,44,49,61-63 and 71-82 are rejected under 35 U.S.C. 103(a) as being unpatentable over Giacoppo in view of Baum et al. US Patent 6,093,050.

Regarding claims 17 and 43, Giacoppo, as applied above, does not specifically teach wherein the first and second customer telecommunication conductors are tip and ring lines.

In the same field of endeavor Baum teaches wherein the first and second customer telecommunications conductors are tip and ring lines, (col. 2, line 55-col. 3, line 19; col. 9, lines 40-62).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the service module of Giacoppo by allowing tip and ring lines as the telecommunication conductors as taught by Baum so that any service wire that is telecommunication related can be broken which will allow testing of the lines.

Regarding claims 18 and 44, Giacoppo, as applied above, does not specifically teach wherein the service module further comprises a line protector.

In the same field of endeavor, Baum teaches wherein the service module further comprises a line protector electrically connected between the first conductor and the third conductor when the service module is mounted to the elongate base, (col. 2, line 55-col. 3, line 9).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the service module of Giacoppo by including a line protector as taught by Baum so that the service module can be protected from high voltage or current which will destroy the service module.

Regarding claims 26 and 49, Giacoppo teaches wherein the service module further comprises a circuit contact member that electrically connects to the second conductor when the service module is mounted to the base, the circuit contact member being configured to electrically connect an electrical device between the first connector and the second connector, (fig. 3).

Regarding claim 61, Giacoppo teaches a telecommunications terminal block for making and breaking connections between a telecommunications conductor and a service wire, (fig. 3, col. 1, lines 33-40), said terminal block comprising:

a housing having a first connector and a second connector mounted therein, the first connector being electrically connected to the telecommunications conductor, (col. 2, lines 19-25);

a first conductor in the housing, the first conductor being electrically connected to the second connector and having a service wire connector portion configured to receive the service wire, (col. 2, lines 19-25; figs. 2 and 3).

Giacoppo does not specifically teach an electrical protection device electrically connecting the first connector and the second connector.

In the same field of endeavor, Baum teaches an electrical protection device electrically connecting the first connector and the second connector, (col. 2, line 55-col. 3, line 9).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the service module of Giacoppo by including a line protector as taught by Baum so that the service module can be protected from high voltage or current which will destroy the service module.

Regarding claim 62, Giacoppo in view of Baum teaches wherein the electrical protection device is a fuse circuit, (col. 3, lines 37-55, Baum).

Regarding claim 63, Giacoppo teaches wherein the housing further comprises:

a base having a first portion and a second portion, the first conductor being mounted in the first portion with the service wire connector portion extending from an upper surface of the base, the first connector and the second connector being mounted in the second portion of the base, the second connector being mounted adjacent the first connector, (fig. 3);

a movably mounted service wire connector member positioned adjacent the upper surface of the base in the first portion, the service wire connector member including a service wire receiving passageway that receives a service wire for connection to the service wire connector portion, the service wire connector member having a first position that provides access to an opening to the service wire receiving passageway to receive a service wire and a second position wherein a portion of the service wire receiving passageway passes through an opening in the service wire connector portion, (fig. 3).

Giacoppo does not specifically teach of a protection module mounted to the based adjacent the second portion, (col. 2, line 55-col. 3, line 9).

In the same field of endeavor, Baum teaches a protection module mounted to the base adjacent the second portion, the electrical protection device being positioned in the protection module.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the service module of Giacoppo by including a line protector as taught by Baum so that the service module can be protected from high voltage or current which will destroy the service module.

Regarding claims 71-82, Giacoppo, as applied above, does not specifically teach a chamber including an environmental sealant that protects the electrical connection of the first connector and the second connector and wherein the environmental sealant is a gel.

In the same field of endeavor, Baum teaches an environmental sealant in the elongate chamber and in the conductor chamber, (col. 1, lines 18-23,56-65) and wherein the environmental sealant is a gel, (col. 1, lines 45-53).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the service module of Giacoppo by providing an environmental sealant in the chamber as taught by Baum so that the service module can be protected from outside environmental harm.

10. Claims 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Giacoppo in view of Meyerhoefer and further in view of Baum.

Regarding claim 23, Giacoppo, as applied above, does not specifically teach an environmental sealant in the elongate chamber that protects the electrical connection of the first connector and the second connector.

In the same field of endeavor, Baum teaches an environmental sealant in the elongate chamber and in the conductor chamber, (col. 1, lines 18-23,56-65).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the service module of Giacoppo by providing an environmental sealant in the chamber as taught by Baum so that the service module can be protected from outside environmental harm.

Regarding claim 24, Giacoppo teaches wherein the plurality of service modules further comprise clip members and the elongate base further comprises a plurality of clip receptacles spaced along the first axis and configured to receive the clip members to mount the service modules to the elongate base, (fig. 3).

Regarding claim 25, Giacoppo in view of Meyerhoefer teach wherein the service module further comprises: a conductor chamber; and an environmental sealant in the conductor chamber; wherein the service wire connector and the second service wire connector are positioned in the

conductor chamber, (col. 1, line 56-65; col. 2, lines 45-54, Meyerhoefer). As stated above, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the service module of Giacoppo by providing an environmental sealant in the chamber as taught by Baum so that the service module can be protected from outside environmental harm.

Allowable Subject Matter

11. Claims 56-58 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

12. Any response to this action should be mailed to:

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

or faxed to:

(703) 872-9306, (for formal communications intended for entry)

Or:

(703) 872-9306, (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ovidio Escalante whose telephone number is 703-308-6262. The examiner can normally be reached on M-F (6:30AM - 5:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan S Tsang can be reached on 703-305-4895. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ovidio Escalante
Examiner
Group 2645
June 10, 2004

OVIDIO ESCALANTE
PATENT EXAMINER

Ovidio Escalante